

## In the Claims:

Please amend the claims as follows:

1. (Previously Presented) A method for estimating a result size of a Group-By operation comprising:
  - organizing a database stored on a computer readable medium with data records maintained in multiple tables;
  - calculating a cumulative selectivity based upon aggregation of individual selectivity of each column in a group of tables in a Group-By operation, wherein the step of calculating a cumulative selectivity is based upon the following mathematical relationship:  $S_{ab} = S_a + S_b - (S_a \times S_b)$ , wherein  $S_a$  is a selectivity of column "a",  $S_b$  is the selectivity of column "b", and  $S_{ab}$  is a cumulative selectivity of columns "a" and column "b"; and
  - multiplying said calculated cumulative selectivity by an input size of said Group-By operation to estimate a result size of said Group-By operation;
  - computing a memory requirement for said Group-By operation based on said estimated result size; and
  - allocating memory for said operation based upon said memory requirement.
2. (Original) The method of claim 1, wherein the step of calculating a cumulative selectivity includes normalizing a selectivity for each column in said group.
3. (Original) The method of claim 2, wherein the step of normalizing a selectivity for each column includes applying a weight factor to said selectivity based upon a relative size of a table in which said column resides.
4. Canceled
5. (Previously Presented) The method of claim 1, further comprising an iterative application of said mathematical relationship for each additional column in said group.

6. (Original) The method of claim 1, wherein the step of calculating a cumulative selectivity includes equivalent columns of said group based upon query predicates.

Claims 7- 19 (Canceled)